

Dictogloss, Noticing, and the Acquisition of Past Counterfactual Conditionals

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Introduction

In recent years, a great deal of research in second language acquisition (SLA) has been conducted in light of cognitive processing. In this paper, the role of noticing¹, which is claimed to be a central cognitive process that drives the development of L2, is investigated (Schmidt, 1990, 1993, 1995, 2001). Theoretically speaking, noticing could take place in any language activity, but one plausible way is through output activities (Swain, 1985, 1993, 1995, 2000, 2005; Swain & Lapkin, 1995). This study focuses on *dictogloss*. Dictogloss is suggested as a useful collaborative task to promote noticing (Kowal & Swain, 1994, 1997; Swain, 1998; Swain & Lapkin, 2001). In what follows, the theoretical framework of output and noticing and of dictogloss and noticing will be elucidated. Then, a methodology and results will be presented.

Output and Noticing

It has been argued that output activities provide L2 learners with a number of facilitating opportunities for interlanguage development (Swain, 1985, 1993, 1995, 2000, 2005; Swain & Lapkin, 1995; cf. Skehan, 1998). The most relevant functions to this study are (1) to promote noticing by pushing learners to move from semantic processing to syn-

tactic processing, and (2) to encourage learners' reflection on their own language use. These functions are particularly important in terms of the Noticing Hypothesis proposed by Schmidt (1990, 1993, 1995, 2001). Schmidt argues that conscious attention to linguistic forms is necessary for them to be acquired. That is to say, unless L2 learners pay conscious attention to forms, their acquisition is less likely to take place. This hypothesis implies that L2 learning is largely driven by what L2 learners pay attention to and notice during input processing.

In producing a target language, L2 learners may merely notice some linguistic features in input due to their frequency or saliency. More important noticing occurs when L2 learners encounter a language problem in their production, which may lead to noticing a gap or a hole (Swain, 2000). Learners consciously recognize that they cannot express precisely what they want to say with their available linguistic resources. Or learners may notice the gap between what they would like to say and what they can say. In these cases, syntactic processing as opposed to semantic processing may be triggered for analyzing incoming input to fill in the hole or the gap. In other words, during the production process, L2 learners are more likely to be pushed to notice their own linguistic problems and start analyzing incoming data more attentively. Since such conscious attention is prerequisite to the acquisition of all aspects of linguistic structures, it can be logically presumed that output plays a significant role in SLA processing.

One caveat is that it cannot be assumed that all types of output activities always promote the same amount of noticing. The effect of output on the promotion of noticing has been investigated in a large number of studies (Izumi, 2002; Izumi & Bigelow, 2000; Izumi, Bigelow, Fujimori, & Fearnow, 1999; Muraoka, 2007a, 2007b; Qi & Lapkin, 2001; Sasaki, 2004; Song & Suh, 2008; Swain & Lapkin, 1995). In these stud-

ies, different output tasks were used: an essay-writing task; a reconstruction task; an oral/written picture-description task in the form of both closed and open tasks; and a three-staged writing task (i.e., a written picture-description task, feedback, and revision). Although previous studies have provided partial support for the theory that output tasks facilitate noticing of target forms, they fail to demonstrate that any type of output activities always leads to noticing in the same manner. Therefore, more research needs to be done to explore the types of output tasks that are likely to result in a higher degree of noticing and learning.

Furthermore, when it comes to the investigation of conscious awareness, it is important to examine carefully whether different levels of awareness equally affect the extent of learning. Awareness can be divided into several levels when it is actually measured in studies. The levels of awareness have been discussed and operationalized in a number of studies (Leow, 1997, 2000, 2001; Robinson, 1995b, 1997a, 1997b; Rosa & O'Neil, 1999; Schmidt, 1995). There are various categorizations of the levels of awareness adopted in current SLA research. A standardized definition has not yet been established. In the present study, awareness is assessed through three levels: (1) underlining, (2) detection, and (3) rule description. The operationalization of each awareness level is presented in the scoring session below.

Moreover, a number of studies have shown that different awareness levels lead to different amounts of learning. A general presumption is that a lower level of awareness (i.e., underlining) does not always lead to significant improvement and that a higher level of awareness (i.e., rule description) or the quality of noticing (i.e., depth of processing) has an important effect on the extent of learning (Izumi, et al. 1999, Izumi & Bigelow, 2000; Leow, 1997, 2001; Qi & Lapkin, 2001; Robinson, 1995; Rosa & O'Neil, 1999). The relationship between awareness levels and

their different effects on L2 learning is an important empirical question that awaits further examination.

Dictogloss and Noticing

This study focuses on dictogloss, one of various output activities. Dictogloss can be a useful collaborative output task to trigger both semantic and syntactic processing. Furthermore, dictogloss is said to facilitate learners' conscious reflection on their own production through talking about the language they are producing. The learners' talk may "serve the function of raising their awareness of forms, rules, and their relationship to the meaning they are trying to express" (Kowal & Swain, 1994, p. 75). The talk occurring in collaborative tasks such as a dictogloss is called collaborative dialogue (Swain, 2000); this kind of talk is claimed to mediate L2 learning.

The dictogloss includes several steps (Kowal & Swain, 1994, 1998; Swain, 1998; Wajnryb, 1990). First, a short passage is read to learners at natural speed. While listening, learners write down some key words or phrases. Then, they work together in small groups and collaborate in reconstructing the text that was read by sharing their information. During the process of reconstruction, they might need to pay attention not only to meaning but also to forms, since reconstruction entails the activation of syntactic processing. The text usually contains grammatical structures which are often problematic for learners at that time. Therefore, theoretically, students cannot avoid reflecting on their interlanguage system and becoming aware of their deficiency in grammar. Learners can fill in the gap by formulating and testing hypotheses based on their limited linguistic knowledge. A beneficial point is that they can rely on each other's knowledge. Collaboration can promote more reflection and syntactic analysis. At the end of the activity, learn-

ers analyze their reconstructed text and compare it with the original.

A large number of studies have examined the effect of dictogloss on interlanguage development (Kim, 2008; Kowal & Swain, 1994, 1997; Lapkin, Swain, & Smith, 2002; Swain, 1998; Swain & Lapin, 2001). In these studies, a number of important findings were presented: the most significant was the substantial evidence showing that students could actually notice gaps between what they wanted to say and what they could say. The learners also discover a deficiency in their interlanguage while completing a text reconstruction task. In addition, a positive relationship between dictogloss and learning outcome was found. However, it was found that students do not always pay attention to focused linguistic structures during the reconstruction process. Moreover, what should not be ignored is that dictogloss activities can not ensure accurate learning. Some studies showed that a few mistakes went unnoticed or were ignored by the students (Kowal & Swain, 1994, 1997). Therefore, a follow-up discussion or feedback is necessary to complete their learning. With regard to noticing, there was plenty of evidence showing that, while jointly constructing a text in groups, the learners noticed some features of language, including lexical items and grammatical structures. Thus, dictogloss activities can facilitate conscious awareness of the connection among form, meaning, and function.

Even though the studies on dictogloss showed that collaborative tasks raise learners' awareness of their linguistic problems, noticing itself has never been the focus of investigation. It is not clear what levels of awareness had been triggered through dictogloss and its unique effects on subsequent learning. This study, using a research design similar to that used in previous dictogloss studies, closely examines what levels of awareness are triggered and what effect each level of awareness has on the learning of the target form.

Past Counterfactual Conditionals

The focused linguistic structure of this study is the past counterfactual conditionals. It has been reported that this structure is difficult to acquire due to its semantic and syntactic complexity (Celce-Murcia & Larsen-Freeman, 1999). According to Celce-Murcia and Larsen-Freeman (*ibid*), conditional sentences consist of two clauses: a main clause and a subordinate clause usually beginning with *if*. The *if*-clause sets up a condition and a consequence is expressed in the main clause. Conditionals can be categorized into factual, future, and imaginative. The past counterfactual conditional falls into the imaginative type. This conditional type expresses something purely imaginary that could have happened in the past. The imagined consequences appear in the main clauses. Since the consequences are purely imaginative, they do not refer to anything that actually happened in the past. This study examines whether the participants can enhance their ability to recognize and produce the past counterfactual conditionals.

Research Questions

Based on the above discussions, the following two research questions were formulated:

- (1) Can dictogloss promote the acquisition of the past counterfactual conditionals?
- (2) Can dictogloss promote the noticing of the past counterfactual conditionals?

Method

The participants in this study were 28 Japanese freshmen enrolled in a private university in Japan. They were placed at the intermediate level of English on the basis of a test conducted in the university. The students were 18–19 years old and belonged to two separate classes. All had completed 6 years of English education in Japanese junior and senior high schools. Only the participants who completed three tests and who received three instructional treatments were considered in the final analysis.

Research Schedule

At the beginning of the semester, all of the participants were asked to complete a questionnaire. The questionnaire asked about age, previous experience of living in a foreign country, and amount of exposure to English outside the classroom. In addition, two types of Pretest (i.e., recognition and production tests) were given to measure knowledge of past counterfactual conditionals four weeks before the actual treatments began. A treatment was provided three times in total, including one practice session at one-week intervals. Immediately after the last treatment was completed, the first immediate sets of posttests (Posttests 1) were given. The delayed post-tests (Posttests 2) and a wind-up questionnaire were given four weeks later. At the end of the semester, feedback in the form of explicit metalinguistic explanation was provided and retrospective interviews were conducted with a few students.

Sequence of Treatment

Each dictogloss activity had four parts: Dictogloss, Probing Questionnaire 1, Feedback, and Probing Questionnaire 2. In Dictogloss, the

participants, in groups of three or four, listened to a passage read aloud three times by a male American native speaker of English, speaking at a natural speed three times. While listening, the students jotted down some key words useful for a later reconstruction task. Then, they were instructed to work together in groups and reconstruct the passage in four sentences. The instructor asked them to reconstruct it as accurately as possible by using the notes of the group members. Their conversation during the task was recorded with their permission. The recorded conversation was transcribed and used for further analyses.

In Probing Questionnaire 1, each participant was given a handout containing three questions: (1) What did you talk about while reconstructing the text in groups?; (2) Were there any linguistic structures you paid attention to?; and (3) If you know the grammatical rules of the linguistic structures you paid attention to, please write them. The participants were asked to write their answers individually. Their comments at this stage were compared with those in Probing Questionnaire 2. This data was used for examining the effect of noticing.

In Feedback, the original text was presented to the participants. The text contained two sentences of past counterfactual conditionals. These sentences appeared in boldface to draw attention to them. The students were asked to read the original text individually and underline any parts that they paid special attention to. This underlining data was used to identify which structures they paid special attention to.

In Probing Questionnaire 2, as in Probing Questionnaire 1, the participants were asked to answer a questionnaire containing three questions: (1) Were there any linguistic structures you paid attention to?; (2) If you know the grammatical rules of the linguistic structures you paid attention to, please write them down; and (3) What ability do you think you need to conduct the reconstruction task? The purpose of giving

Probing Questionnaire 2 after Feedback is to investigate any changes after the participants were exposed to the original text. The data obtained from Probing Questionnaire 1 and 2 were used to examine participants' awareness levels.

Materials

The study created two dictogloss texts each consisting of four sentences. In each text, two sentences containing the past counterfactual conditionals were included. The two texts were on a topic related to NPO/NGO work. (see Appendix A for the texts used in this study).

Measurement

Recognition and production tests were used to measure any developmental changes. Each test has three forms² (i.e., Form A, Form B and Form C). All of the tests consist of 8 target sentences containing the past counterfactual conditional and 8 distracter sentences. Since each target sentence consists of two parts such as a subordinate clause and a main clause, there are 16 test items in total.

Awareness levels were assessed by using three measurements: (1) underlining, (2) detection, and (3) rule description. Awareness levels range from low awareness level (i.e., underlining) to high awareness level (i.e., rule description). The next section offers detailed information about the scoring of these measures.

This study also examined the content of collaborative dialogues through analyzing conversations tape-recorded during the reconstruction task. First, the recorded dialogues were transcribed; then, language-related episodes (LREs) were identified. LREs are defined as “any segment of the protocol in which a learner either spoke about a language problem he/she encountered while writing and solved it either correctly

or incorrectly; or simply solved it without having explicitly identified it as a problem” (Swain & Lapkin, 1995, p. 378). The LREs were further coded into either “lexical-based” or “form-based”, following Swain and Lapkin (1998). The “lexical-based” LREs include episodes in which the participants tried to seek English vocabulary or find the Japanese meaning of some English words. The “form-based” LREs involve episodes in which the students checked the spelling of English words or focused on grammar features such as word order, noun plurals, and the past counterfactual conditional. Examples of each LRE are presented below:

Example 1 : Lexical-based LRE coded as *Word Meaning*

Student A : 掘るってなんて言うんだろう？

(How do you say “Horu” in English?)

Student B : なんだっけ、掘るって？

(I am not sure. How do you say “Horu” in English?)

Student C : 掘る . . .

(“Horu” . . .)

Student D : carve、carve!

Student C : carve か。carve なんて言ってた？

(“Carve.” Did you hear the word “carve”?)

Student D : あ、違った、ごめん、ごめん。これは木だった。

(Oh, my mistake. I’m sorry. “Carve” means “trees”).

Student C : 木？ははは。

(“Trees?”)

Student D : こっちだった、dig、dig。

(This is the answer, “dig”).

Example 2 : Form-based LRE coded as *Past Counterfactual Conditional*

Student A : 掘らなかったら、だから仮定法でしょ。

(Since “no one dug well”, we should use the counterfactual conditional.)

Student B : 仮定法だったら . . .

(If we use the counterfactual conditional . . .)

Student C : -ing じゃないよね ?

(We don't use the “-ing” form.)

Student B : 過去形 ?

(Do we use the past tense?)

Student A : digged?

Student D : digged ね。

(Yes, “digged”.)

Student A : is いらないんじゃない ?

(I don't think we need “is”.)

Student B : うん いらない。

(No, we do not need it.)

The researcher and her assistant individually conducted the data analyses following a joint training session on data identification and categorization. Any disagreements that occurred in the coding process were resolved through discussion. When agreement could not be reached, the data were excluded. For these reasons, four LREs were removed from the last analysis.

Scoring

In the case of the recognition tests, one point was assigned for each correct choice. The maximum score was 16 points. As to the production tests, two scoring procedures were adopted: target-like analysis and in-

terlanguage analysis. In the target-like analysis, one point was assigned for each correct production of the if-clause and the main clause. In this analysis, 16 was the maximum number of points. For the interlanguage analysis, the study created a precise rubric to follow (see Table 1). One point was assigned to each linguistic component, allowing a maximum score of 48 points. Mistakes relating to the past tense were not taken into consideration. For example, if the participant wrote “If people should have not drank,” he/she still got one point for the production of drank, in spite of the incorrect form. In the case of a sentence such as “they would had stayed healthy,” one point was assigned for the correct production of *would and stayed*, respectively. In this study, the scores obtained through the target-like analysis are called *target-like scores*; those obtained through the interlanguage analysis are called *interlanguage scores*.

Table 1 *Rubric for Interlanguage Analysis*

	Affirmative Form (4 sentences)	Negative Form (4 sentences)
<i>If</i> -Clause	(a) [+/- had] (b) [+/- PP] × 4=8 points	(a) [+/- had] (b) [+/- not] (c) [+/- PP] × 4=12 points
Main-Clause	(a) [+/- Past Tense Modal] (b) [+/- have] (c) [+/- PP] × 4=12 points	(a) [+/- Past Tense Modal] (b) [+/- not] (b) [+/- have] (c) [+/- PP] × 4=16 points (Total: 48 points)

The three levels of awareness were scored in the following ways. Awareness at the level of [Detection] was assessed through the probing questionnaires 1 and 2 in each dictogloss activity. One point was assigned for each of the following three metalinguistic terms: [*Kateihou*

(Counterfactual Conditionals)] + [*Kako* (Past)] + [*Kanryou* (Perfect)]. Some students wrote just *if* or *if-Setzu* (if-clause) rather than using metalinguistic terms. In these cases, one point was assigned. The detection data obtained from the questionnaire 1 is called [Detection 1] and those obtained from the questionnaire 2 [Detection 2]. The possible maximum score in each questionnaire is 3 points.

Awareness at the level of [Rule Description] was also assessed through probing questionnaires 1 and 2. For scoring, the rubric for the interlanguage analysis was used again (see Table 1). One point was assigned to each linguistic component. The maximum possible score is 7 points. Some participants wrote *iyodoushi* (present tense modal) rather *iyodoushi-kako* (past tense modal). In this case, 0.5 point was assigned. In this study, the data obtained from questionnaire 1 is called [Rule 1] and that from questionnaire 2 [Rule 2].

Finally, awareness at the level [Underline] was assessed during the feedback session. One point was assigned if the participants underlined any parts in if-clause and main-clause. The maximum possible score is 4 points.

Analyses

The scores obtained from the recognition tests showed population normality and homogeneous variances in all levels. To address Research Question 1, the scores were submitted to one-way repeated measures Analysis of Variance (ANOVA). The within-group variable was achieved by giving tests with three levels (Pretest, Posttest 1, Posttest 2). Since the data from the production tests did not show normality or homogeneous variances, non-parametric techniques were used for further analyses. The Friedman Tests and the Wilcoxon signed-ranked tests were used to investigate any differences among the production tests.

Results

Recognition and Production Tests

Table 2 presents descriptive statistics for the recognition and the production tests. Figure 1 displays the averages of the target-like scores. Figure 2 shows the averages of the interlanguage scores. These figures show that the target-like mean scores of the recognition tests increased from Pretest to Posttest1, but decreased from Posttest 1 to Posttest 2. The target-like mean scores of the production tests remain unchanged across the tests; however, the interlanguage means scores on the same tests display positive development from Pretest to Posttest 1, but declined slightly from Posttest 1 to Posttest 2.

Table 2 *Descriptive Statistics for Test Scores*

Tests	Recognition Test (Target-like Score)	Production Test (Target-like Score)	Production Test (Interlanguage Score)
Pretest	$M = 7.93$ $SD = 3.84$	$M = 1.57$ $SD = 3.27$	$M = 10.89$ $SD = 13.06$
Posttest 1	$M = 10.00$ $SD = 4.10$	$M = 1.75$ $SD = 2.59$	$M = 17.54$ $SD = 11.73$
Posttest 2	$M = 8.14$ $SD = 4.47$	$M = 2.14$ $SD = 4.39$	$M = 16.75$ $SD = 13.9$

Table 3 presents the result of the repeated one-way ANOVA using the scores taken from the recognition tests. The main effect for Tests was found, $F(2, 54) = 3.53, p < .05$. Multiple comparisons using Least Significant Difference (LSD) revealed that the mean score of Posttest 1 was significantly different from both Pretest and Posttest 2. These analyses seem to indicate that the recognition ability of the participants had improved from Pretest to Posttest 1, but the students lost the skill by the time of Posttest 2.

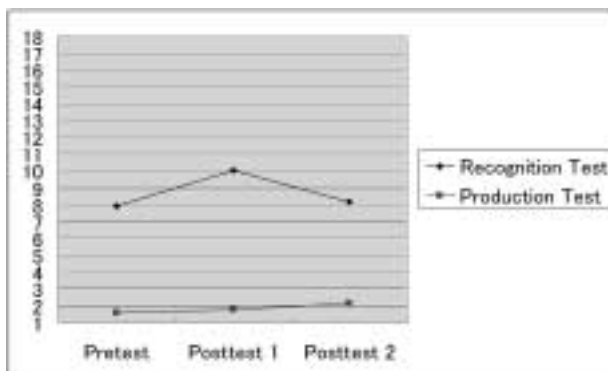


Figure 1. Mean Scores from Recognition and Production Tests (Target-like Scores)

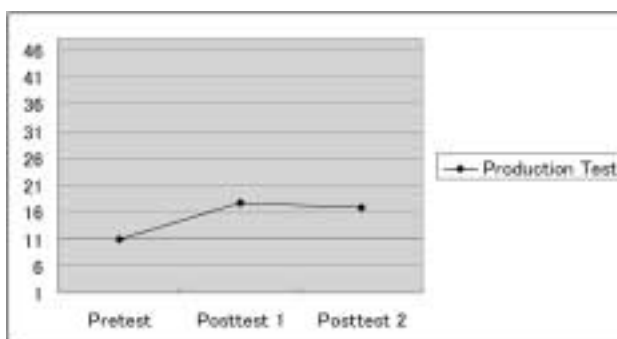


Figure 2. Mean Scores from Production Tests (Interlanguage Scores)

Table 3 *Result of Repeated One-Way ANOVA from Recognition Test*

Source	SS	df	MS	F
Tests	72.667	2	36.333	3.525*
Errors	556.667	54	10.309	

* $p < .05$

With respect to the productions tests, the results of the Friedman tests revealed that there were significant differences in the scores obtained through the interlanguage analyses, $\chi^2(2, N = 28) = 12.472, p < .05$; nonetheless, no significant differences in the target-like scores were found, $\chi^2(2, N = 28) = .840, p > .05$. Because of significant differences in the interlanguage scores in the three production tests, Wilcoxon signed-rank tests were given. Significant differences were found between Pretest and Posttest 1, $z = -2.552, p < .016$ and between Pretest and Posttest 2, $z = -2.802, p < .016$. No significant difference was found between Posttest 1 and Posttest 2, $z = -.469, p > .016$. The inspection of the distribution patterns in the three production tests indicates that more participants obtained higher scores in Posttest 1 and Posttest 2 than in Pretest. It appears that the positive effect lasted through Posttest 2.

Awareness Levels

Three levels of awareness were measured in this study. Table 4 presents the results from Dictogloss 1 and 2. As Table 4 shows, the average scores of [Detection] and [Rule Description] increased from Dictogloss 1 to Dictogloss 2. This might indicate that the participants were more conscious of the use of the past counterfactual conditionals in Dictogloss 2 than they were in Dictogloss 1. Conversely, the scores of [Underline] remained almost constant in the two dictogloss activities.

In Dictogloss 1, the average scores of both [Detection] and [Rule Description] increased from Questionnaire 1 to Questionnaire 2. This implies that the participants became more aware of the target structure after they were exposed to the original text where the sentences of the past counterfactual conditionals were visually enhanced (i.e., through bolding). It can be said that bolding might have helped the participants pay increased attention to the target forms.

The results from Dictogloss 2 demonstrated a slightly different pattern. Regarding [Detection], the average scores declined somewhat from Detection 1 to Detection 2. However, the mean scores of [Rule Description] increased from Rule 1 to 2. These results show that these two levels of awareness function differently.

Table 4 *Levels of Awareness*

Awareness Levels	Dictogloss 1	Dictogloss 2
Detection 1	0.41	0.79
Detection 2	0.54	0.61
<i>Average</i>	<i>0.48</i>	<i>0.7</i>
Rule 1	0.3	0.41
Rule 2	0.66	1.20
<i>Average</i>	<i>0.48</i>	<i>1.61</i>
Underline	2.5	2.18

Note. The maximum points in Detection 1 and 2 is 3; that of Rule 1 and 2 is 7; that of Underline is 4. All figures above indicate averages.

[+Noticing] vs. [–Noticing]

In order to discover precisely how many participants noticed the past counterfactual conditionals during the treatment phases, further analyses were conducted. Utilizing the data related to [Detection] and [Rule Description], the participants were coded either as [+Noticing] or as [–Noticing]. They were coded as [+Noticing] when they had obtained more than one point in either [Detection 1] or [Detection 2] and in either [Rule 1] or [Rule 2]. Therefore, those participants coded as [+Noticing] commented that they paid attention to the past counterfactual conditionals or that they wrote at least a partial rule of the form in the probing questionnaires. On the other hand, the participants coded as

[–Noticing] had zero points in both [Detection] and [Rule], which implies no indication of noticing. Table 5 presents the results of the analyses. As the table shows, the number of participants who were coded [+Noticing] increased from Dictogloss 1 to 2 at both awareness levels. Focusing on Dictogloss 2, 75% of the participants reported paying conscious attention to the past counterfactual conditionals. Also, more than half of the participants could write down at least partial rule of the target form.

With respect to the relationship between [Detection] and [Rule], almost all of the participants who were coded [+Noticing] at the awareness level of [Rule] were also coded as [+Noticing] at the awareness level of [Detection] in both Dictogloss 1 and 2. There was only one participant in each dictogloss who could describe the rule in spite of having given no indication of noticing it at the [Detection] level. On the whole, the data indicates that [Detection] is a prerequisite of [Rule Description] and that these two levels are closely connected to each other. In other words, unless the L2 learners detect a linguistic form, they are unlikely to process the form deeply.

Table 5 *[+Noticing] vs. [–Noticing]*

Awareness Levels	[+Noticing]		[–Noticing]	
	Dictogloss 1	Dictogloss 2	Dictogloss 1	Dictogloss 2
Detection	18 (64 %)	21 (75 %)	10 (36 %)	7 (25 %)
Rule	10 (36 %)	16 (57 %)	18 (64 %)	12 (43 %)

Note. The total number of the participants is 28.

Content of Collaborative Dialogue

53 LREs were identified from eight groups consisting of two separate classes, each comprising four groups, undertaking two dictogloss activities. In which, 13 lexical-based LREs and 40 form-based LREs were

identified (see Table 6). These findings indicate that the participants produced a larger number of form-based LREs than lexical-based LREs. However, with respect to the past counterfactual conditionals, only four LREs (9% of the total LREs) were found. A close analysis shows that two LREs out of the four were generated from one group in Dictogloss 1; the other two came from two different groups in Dictogloss 1 and 2. That is to say, out of eight groups, only three groups talked about the use of past counterfactual conditionals during the reconstruction task. These results show that the participants did not pay much attention to the target forms during the reconstruction tasks.

Table 6 *Occurrence of Lexical-Based and Form-Based LREs*

Language Related Episodes (LREs) (Total = 54)			
Lexical-Based LREs		Form-Based LREs	
Word Meaning	total 13	Spelling	19
		Word Order	12
		Noun Plurals	5
		Past Counterfactual Conditional	4
	<i>total 13 (24%)</i>		<i>total 40 (76%)</i>

Discussion

The present study investigated the effect of dictogloss on noticing and the acquisition of past counterfactual conditionals. The results showed that there was positive improvement from Pretest to Posttest 1 in both recognition and production tests; the improvement lasted through the time of Production Posttest 2. Based on these findings, it can be said that the answer to Research Question 1 concerning the effects of dictogloss on learning is affirmative. That is to say, this study shows that dictogloss activities had at least short-term positive effects

on the acquisition of the target forms.

With respect to Research Question 2, which concerns the effect of dictogloss on noticing, the findings also seem to show positive results. There was a slight decrease in the awareness level of [Detection] in Dictogloss 1 and no major change at the awareness level of [Underlining]. Nonetheless, the other data revealed an overall increase of awareness from Detection 1 to 2 in Dictogloss 2, from Rule 1 to Rule 2 in Dictogloss 1 and 2, and from Dictogloss 1 to Dictogloss 2 at the awareness level of both [Detection] and [Rule]. Furthermore, the secondary analysis which classified the participants in either [+Noticing] and [-Noticing] demonstrates that the percentage of the participants who detected and described the rules of the past counterfactual conditionals moderately increased from 64% to 75% at the level of [Detection] and greatly increased from 36% to 57% at the awareness level of [Rule]. From these results, it can be concluded that dictogloss activities moderately promoted the noticing of the past counterfactual conditionals.

The overall results of this study indicate the positive effects of dictogloss activities on the acquisition of the past counterfactual conditionals and on noticing. Therefore, the findings provide further support for the idea proposed in other studies that dictogloss helps L2 learners focus on linguistic forms. Moreover, this study confirms that dictogloss is one beneficial output activity that can promote the noticing of some target forms.

However, there are a number of caveats to be discussed. First, since this study did not include a comparison group which did not receive any treatments, the possibility that the results were due to the participants' natural maturity or factors other than dictogloss cannot be eliminated. Future research should include a comparison group in order to make the findings empirically firmer. Second, since this study gave the feedback

sessions after the dictogloss activities, it cannot state whether a positive effect was generated from the dictogloss activities alone or the combination of dictogloss activities and feedback. This study analyzed the content of the collaborative dialogue, and 53 LREs were identified. The data showed that only 4 LREs were related to the past counterfactual conditionals, which comprise only 9% of the total LREs. Many participants did not talk about the past counterfactual conditionals during the dictogloss activities. Nonetheless, the present study found that a large percentage of the participants noticed the target form, as mentioned above. This discrepancy might indicate that we cannot always assume that the participants talk about only what they have noticed; participants may not also talk about what they notice. Another interpretation would be that they might have noticed the target form without realizing what it means; therefore, they did not say anything about it during the reconstruction task. In the future, it will be necessary to investigate the unique effects of dictogloss and feedback.

Despite these caveats, two points are worth reporting. First, following the study by Izumi and Below (2000), the present study employed both target-like and interlanguage analyses to analyze the production data. If only the target-like analysis had been used, significant findings would not have been found. The interlanguage analysis was appropriate for capturing every small change of interlanguage development. Therefore, if the acquisition of a target structure takes several processing steps to be completed, it might be better to utilize a more meticulous analysis.

Second, the present study appears to show that there are multiple levels of awareness such as [Underlining], [Detection], and [Rule Description]. Even though the study could not clearly identify the unique function of [Underlining], the relationship between [Detection] and

[Rule Description] was evident. The study found that [Detection] was prerequisite to [Rule Description]. In other words, if the participants did not detect the target form, they were unlikely to be able to describe its rule. The implication of this finding in a classroom context is that teachers should let their students detect a form before they teach it. This may increase the chances for the students to process the form more deeply, leading, it is hoped, to interlanguage restructuring in future learning.

Notes

1. According to Schmidt (1995), the term *noticing* is defined as focal awareness and subjective experience. In this paper, noticing and conscious awareness are used interchangeably.
2. At the initial stage, both recognition and production tests were created with two versions: Form A and Form B. Form C was created by incorporating half of the test items in Form A with half from Form B. Prior to this study, 65 students in a private university, composed of two separate classes, participated in the test-taking procedure only. The levels of both groups were equivalent to the results of a placement test conducted at the university. Form A was tested on 34 students. Form B was tested on 31 students. The average scores of Form A and Form B were almost the same and did not reveal any significant difference when the two scores were compared. Based on these results, this study presumed that Form A and Form B were equivalent tests.

APPENDIX A

Text Used in Dictogloss 1

In many African and Asian countries, clean water is difficult to get.

For this reason, NPO workers started to dig wells. If nobody had started to dig wells, people there would have continued to use unclean water. If clean water had not been available, they could not have lived healthy lives.

Text Used in Dictogloss 2

There are still few school buildings in African and Asian countries. NPO people, however, recently started to build schools in those countries. If NPO workers had taken no action, people there would not have received education. If education had not been available, it would have been very difficult for them to read and write.

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